**In the Specification:**

**Please replace the paragraph beginning on page 6, line 7 with the following amended paragraph:**

It has been recognized that what is needed is a method for ~~perform~~ performing efficient, highly accurate radio frequency circuit simulation. Broadly speaking, the present invention fills these needs by providing a method and device for multi-interval Chebyshev collocation. It should be appreciated that the present invention can be implemented in numerous ways, including as a process, an apparatus, a system, a device or a method. Several inventive embodiments of the present invention are described below.

**Please replace the paragraph beginning on page 11, line 4 with the following amended paragraph:**

The Gear methods are implicit in only "one-point-at-a-time". They are called one-stage methods. At each timepoint, for a method of order $p$, the solution vector at only $p + 1$ points is involved, and if $p$ previous timepoints are known, a nonlinear system of size $N$ must be solved to find the solution at the next timepoint. Each step of a shooting method involves the factorization of the circuit Jacobian matrix. Because this matrix is usually very sparse, it can be factored with few fill-ins, in nearly $O(N)$ time. The order of polynomial approximation $p$ is usually fixed at a ~~tow~~ low value, and increased accuracy is obtained by locally changing the timesteps based on estimates of the truncation errors induced by the order-$p$ polynomial approximation. Note that higher-order Gear methods can not be used at points after $C^0$ or sharp-transition points because approximation of the differential operator using a $p$-order Gear method involves $p$ preceding points. Higher-order approximation across $C^0$ points or sharp-transition points leads to oscillation of the solution and makes the

solution even less accurate than a first-order solution. A similar problem occurs if the timestep ratios are changed too rapidly.